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Hodge

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(54) **SYSTEM AND METHOD FOR INMATE NOTIFICATION AND TRAINING IN A CONTROLLED ENVIRONMENT FACILITY**

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(56) **References Cited**

U.S. PATENT DOCUMENTS

4,054,756 A 10/1977 Comella et al.
4,652,700 A 3/1987 Matthews et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0989720 A1 3/2000
GB 2400284 A 10/2004

(Continued)

OTHER PUBLICATIONS

Oma, "Service User Profile Management Requirements", Candidate Version 1.0, Sep. 2009.*

(Continued)

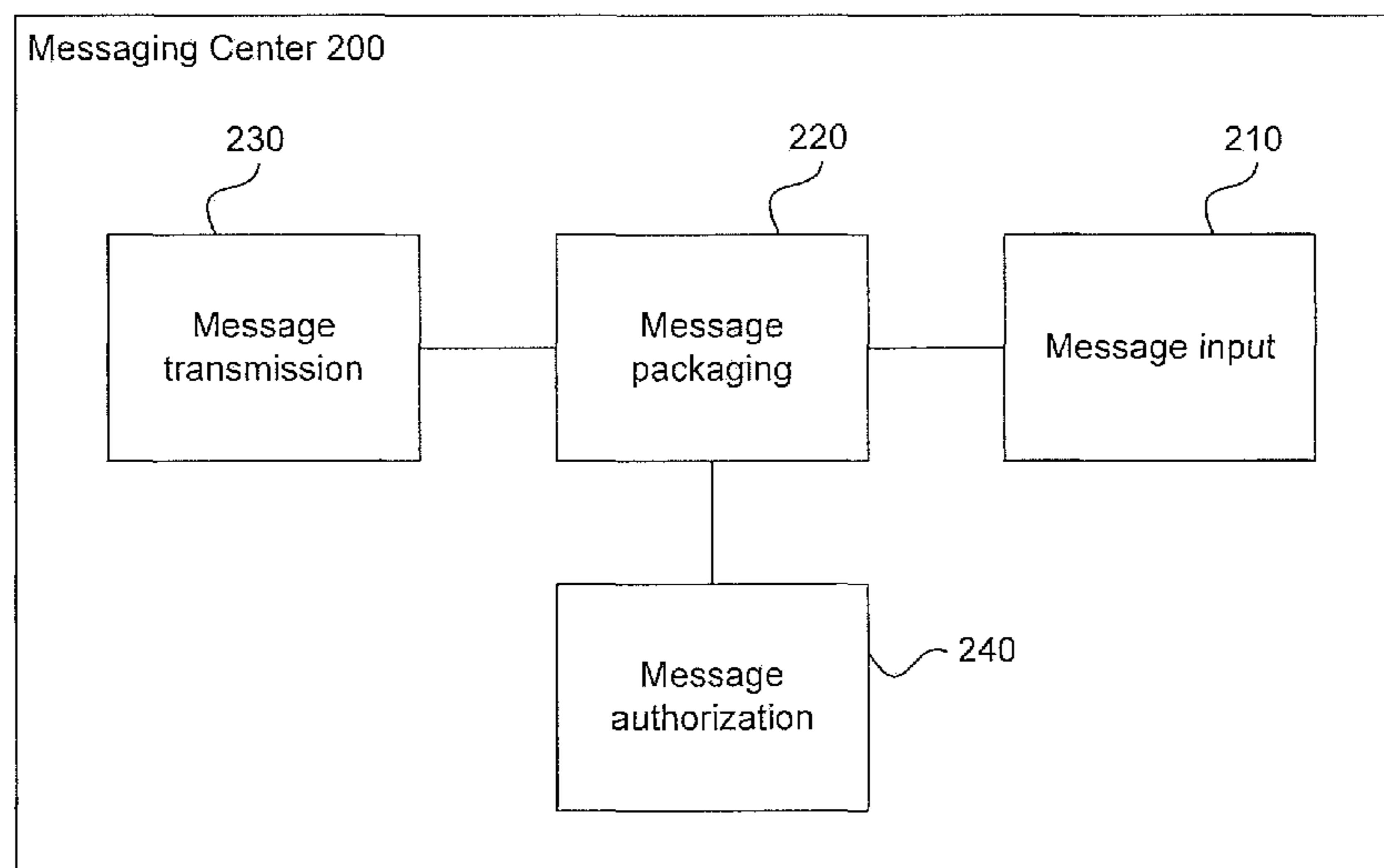
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(57) **ABSTRACT**

A messaging system for relaying messages to groups of inmates located in one or more controlled-environment facilities. The system receives a message from a user and a recipient designation identifying those inmates designated for receiving the message. The system performs a content check of the message or requests administrator authorization of the message, and then packages the message in a format designated by the facility. The packaged message includes the message itself, and also recipient information and other delivery information. The message may be packaged uniquely according to facility specifications. At the facility, the received message is unpacked. Recipients are identified from the recipient designation in the message, and delivery methods are retrieved for each of the intended recipients. Delivery of the message is then carried out, at a time designated in the message, according to the retrieved delivery methods.

20 Claims, 6 Drawing Sheets



(51)	Int. Cl.		6,411,685 B1	6/2002	O'Neal
	<i>H04L 51/066</i>	(2022.01)	6,477,492 B1	11/2002	Connor
	<i>G06Q 50/26</i>	(2012.01)	6,490,611 B1	12/2002	Shen et al.
	<i>H04L 9/40</i>	(2022.01)	6,493,447 B1	12/2002	Goss et al.
	<i>H04L 51/214</i>	(2022.01)	6,526,335 B1	2/2003	Treyz et al.
(52)	U.S. Cl.		6,560,323 B2	5/2003	Gainsboro
	CPC	<i>H04L 51/214</i> (2022.05); <i>H04L 63/102</i>	6,570,970 B2	5/2003	Gruchala et al.
		(2013.01); <i>H04L 67/12</i> (2013.01); <i>H04L</i>	6,591,367 B1	7/2003	Kobata et al.
		<i>63/083</i> (2013.01); <i>H04L 63/0861</i> (2013.01)	6,603,838 B1	8/2003	Brown et al.
(58)	Field of Classification Search		6,606,648 B1	8/2003	Mukundan et al.
	CPC	<i>H04L 63/0861</i> ; <i>H04L 67/12</i> ; <i>H04L 45/74</i> ;	6,611,583 B1	8/2003	Gainsboro
		<i>H04L 63/20</i> ; <i>G06Q 50/26</i> ; <i>G06Q</i>	6,639,977 B1	10/2003	Swope et al.
		<i>10/0637</i> ; <i>G06Q 30/0202</i> ; <i>G06F</i>	6,665,378 B1	12/2003	Spielman et al.
		<i>2221/2111</i>	6,665,380 B1	12/2003	Cree et al.
	See application file for complete search history.		6,668,045 B1	12/2003	Mow
(56)	References Cited		6,681,114 B2	1/2004	Chang et al.
	U.S. PATENT DOCUMENTS		6,684,248 B1	1/2004	Janacek et al.
	4,766,604 A	8/1988 Axberg	6,714,982 B1	3/2004	McDonough et al.
	4,935,956 A	6/1990 Hellwarth et al.	6,775,359 B1	8/2004	Ron et al.
	5,068,888 A	11/1991 Scherk et al.	6,788,771 B2	9/2004	Manto
	5,319,702 A	6/1994 Kitchin et al.	6,801,932 B1	10/2004	Picoult et al.
	5,351,287 A	9/1994 Bhattacharyya et al.	6,819,932 B2	11/2004	Allison et al.
	5,535,261 A	7/1996 Brown et al.	6,850,147 B2	2/2005	Prokoski et al.
	5,539,812 A	7/1996 Kitchin et al.	6,857,024 B1	2/2005	Chen et al.
	5,553,145 A	9/1996 Micali	6,865,260 B1	3/2005	Meadows et al.
	5,648,916 A	7/1997 Manduley	6,879,677 B2	4/2005	Trandal et al.
	5,655,013 A	8/1997 Gainsboro	6,950,502 B1	9/2005	Jenkins
	5,705,995 A	1/1998 Lafflin et al.	7,003,308 B1	2/2006	Fuoss et al.
	5,740,231 A	4/1998 Cohn et al.	7,013,002 B2	3/2006	Link et al.
	5,745,558 A	4/1998 Richardson, Jr. et al.	7,039,071 B2	5/2006	Pekonen
	5,768,355 A	6/1998 Salibrici et al.	7,039,171 B2	5/2006	Gickler
	5,778,313 A	7/1998 Fougnes	7,039,949 B2	5/2006	Cartmell et al.
	5,805,810 A	9/1998 Maxwell	7,046,779 B2	5/2006	Hesse
	5,826,034 A	10/1998 Albal	7,058,163 B1	6/2006	Parekh et al.
	5,838,790 A	11/1998 McAuliffe et al.	7,079,636 B1	7/2006	McNitt et al.
	5,848,397 A	12/1998 Marsh et al.	7,085,359 B2	8/2006	Crites et al.
	5,854,975 A	12/1998 Fougnes et al.	7,095,829 B2	8/2006	Claudatos et al.
	5,872,926 A	2/1999 Levac et al.	7,106,843 B1	9/2006	Gainsboro et al.
	5,894,558 A	4/1999 Falker	7,136,462 B2	11/2006	Pelaez et al.
	5,937,037 A	8/1999 Kamel et al.	7,158,621 B2	1/2007	Bayne
	5,956,717 A	9/1999 Kraay et al.	7,191,860 B2	3/2007	Tucker et al.
	5,958,005 A	9/1999 Thorne et al.	7,197,560 B2	3/2007	Caslin et al.
	5,982,506 A	11/1999 Kara	7,248,680 B1	7/2007	Gainsboro
	5,987,611 A	11/1999 Freund	7,256,816 B2	8/2007	Profanchik et al.
	6,002,689 A	12/1999 Christie et al.	7,260,383 B1	8/2007	Ngan
	6,035,327 A	3/2000 Buckley et al.	7,265,853 B1	9/2007	Kara et al.
	6,052,454 A	4/2000 Kek et al.	7,277,695 B2	10/2007	Petry et al.
	6,061,718 A	5/2000 Nelson	7,278,028 B1	10/2007	Hingoranee
	6,064,963 A	5/2000 Gainsboro	7,333,798 B2	2/2008	Hodge
	6,067,514 A	5/2000 Chen	7,359,494 B2	4/2008	Leonard
	6,092,192 A	7/2000 Kanevsky et al.	7,363,302 B2	4/2008	Lester
	6,097,791 A	8/2000 Ladd et al.	7,496,345 B1	2/2009	Rae et al.
	6,137,864 A	10/2000 Yaker	7,505,406 B1	3/2009	Spadaro et al.
	6,145,004 A	11/2000 Walsh	7,519,076 B2	4/2009	Janssen et al.
	6,151,679 A	11/2000 Friedman et al.	7,551,732 B2	6/2009	Anders
	6,161,139 A	12/2000 Win et al.	7,561,679 B1	7/2009	Kalbag
	6,173,259 B1	1/2001 Bijl et al.	7,561,680 B1	7/2009	Falcone et al.
	6,173,284 B1	1/2001 Brown	7,565,687 B2	7/2009	Noguchi et al.
	6,192,114 B1	2/2001 Council	7,583,974 B2	9/2009	Benco et al.
	6,226,362 B1	5/2001 Gerszberg et al.	7,651,680 B2	1/2010	Breton et al.
	6,226,363 B1	5/2001 Miller	7,664,689 B1	2/2010	Rosenfield et al.
	6,233,313 B1	5/2001 Farris et al.	7,673,058 B1	3/2010	White et al.
	6,233,318 B1	5/2001 Picard et al.	7,681,032 B2	3/2010	Peled et al.
	6,246,871 B1	6/2001 Ala-Laurila	7,742,581 B2	6/2010	Hodge et al.
	6,249,808 B1	6/2001 Seshadri	7,742,582 B2	6/2010	Harper
	6,285,777 B2	9/2001 Kanevsky et al.	7,783,021 B2	8/2010	Hodge
	6,304,636 B1	10/2001 Goldberg et al.	7,804,941 B2	9/2010	Keiser et al.
	6,356,867 B1	3/2002 Gabai et al.	7,881,446 B1	2/2011	Apple et al.
	6,363,414 B1	3/2002 Nicholls et al.	7,899,167 B1	3/2011	Rae
	6,366,651 B1	4/2002 Griffith et al.	8,000,269 B1	8/2011	Rae et al.
	6,389,276 B1	5/2002 Brilla et al.	8,014,800 B2	9/2011	Törnkvist
	6,400,272 B1	6/2002 Holtzman et al.	8,130,919 B2	3/2012	Kalbag
			8,180,028 B1 *	5/2012	Falcone H04M 15/858 379/114.05
			8,190,121 B2	5/2012	Smith et al.
			8,204,177 B2	6/2012	Harper
			8,218,736 B1	7/2012	McClintock et al.
			8,232,862 B2	7/2012	Lowe
			8,238,534 B2	8/2012	Link et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

8,243,891 B2	8/2012	Hodge et al.	2005/0287993 A1	12/2005	Gogic
8,255,300 B2	8/2012	Polozola et al.	2006/0062355 A1	3/2006	Leonard
8,458,732 B2	6/2013	Hanna et al.	2006/0087554 A1	4/2006	Boyd et al.
8,488,756 B2	7/2013	Hodge et al.	2006/0098796 A1	5/2006	Link
8,509,390 B2	8/2013	Harper	2006/0149644 A1	7/2006	Sulmar et al.
8,515,031 B2	8/2013	Hodge et al.	2006/0168015 A1	7/2006	Fowler
8,577,003 B2	11/2013	Rae	2006/0245552 A1	11/2006	Hayashi
8,626,118 B2	1/2014	Smith et al.	2006/0245559 A1	11/2006	Hodge et al.
8,725,115 B2	5/2014	Liu et al.	2006/0245579 A1	11/2006	Bienfait et al.
8,838,622 B2	9/2014	Irving et al.	2007/0041545 A1	2/2007	Gainsboro
9,002,395 B2 *	4/2015	Krukar H04L 51/20 455/425	2007/0044734 A1	3/2007	Maloney et al.
9,043,813 B2	5/2015	Hanna et al.	2007/0155411 A1	7/2007	Morrison
9,077,680 B2 *	7/2015	Harper G06Q 50/26	2007/0165790 A1	7/2007	Taori
9,282,188 B2	3/2016	Hodge et al.	2007/0195751 A1	8/2007	Cai et al.
9,306,883 B2	4/2016	Hodge et al.	2007/0207785 A1	9/2007	Chatterjee et al.
9,571,500 B1 *	2/2017	Chachar G06F 21/629	2007/0233610 A1	10/2007	Gyllenskog et al.
9,621,714 B2	4/2017	Seyfedinov	2007/0239898 A1	10/2007	Friend et al.
9,667,663 B2	5/2017	Hodge et al.	2007/0263853 A1	11/2007	Pearson et al.
9,680,878 B2	6/2017	Hodge et al.	2007/0283006 A1	12/2007	Hong
9,680,879 B2	6/2017	Hodge et al.	2008/0037722 A1	2/2008	Klassen
9,692,718 B2	6/2017	Bennett	2008/0126951 A1	5/2008	Sood et al.
9,757,032 B2	9/2017	Gross et al.	2008/0200152 A1	8/2008	Moore
9,787,724 B2	10/2017	Hodge et al.	2008/0219414 A1	9/2008	Ramamoorthy et al.
9,807,123 B2	10/2017	Hodge et al.	2008/0249778 A1	10/2008	Barton et al.
9,871,915 B2	1/2018	Hodge et al.	2008/0260118 A1	10/2008	Lyle
9,876,915 B2	1/2018	Hodge et al.	2009/0054031 A1	2/2009	Smith et al.
9,923,932 B2	3/2018	Hodge et al.	2009/0086631 A1	4/2009	Jayapalan et al.
9,967,291 B1	5/2018	Hodge et al.	2009/0086936 A1	4/2009	Clifford et al.
10,116,707 B2	10/2018	Hodge et al.	2009/0197622 A1	8/2009	Atarius
10,218,842 B2	2/2019	Hodge et al.	2009/0201886 A1	8/2009	Lee et al.
10,397,410 B2	8/2019	Hodge et al.	2009/0203361 A1	8/2009	Huang et al.
10,560,488 B2	2/2020	Hodge et al.	2009/0274279 A1	11/2009	Reynolds
10,749,827 B2	8/2020	Hodge	2010/0023472 A1	1/2010	Loeb
10,757,265 B2	8/2020	Seyfedinov	2010/0054433 A1	3/2010	Gustave et al.
2001/0036821 A1	11/2001	Gainsboro et al.	2010/0056110 A1	3/2010	Liu et al.
2002/0007453 A1	1/2002	Nemovicher	2010/0138357 A1	6/2010	Mufti-Bey
2002/0054674 A1	5/2002	Chang et al.	2010/0153114 A1	6/2010	Shih et al.
2002/0071537 A1	6/2002	Gainsboro	2010/0189228 A1 *	7/2010	Seyfedinov H04M 3/42 379/88.14
2002/0111887 A1	8/2002	McFarlane et al.	2010/0241663 A1	9/2010	Huang et al.
2002/0159600 A1	10/2002	Weiner	2010/0254263 A1	10/2010	Chen et al.
2002/0183040 A1	12/2002	Lundstrom et al.	2010/0299761 A1	11/2010	Shapiro
2003/0002639 A1	1/2003	Huie	2010/0318441 A1	12/2010	Harper
2003/0009333 A1	1/2003	Sharma et al.	2011/0106894 A1	5/2011	Hodge et al.
2003/0070076 A1	4/2003	Michael	2011/0286585 A1	11/2011	Hodge
2003/0083041 A1	5/2003	Kumar et al.	2011/0286591 A1	11/2011	Fulton et al.
2003/0086546 A1	5/2003	Falcone et al.	2012/0094680 A1	4/2012	Stackelius et al.
2003/0099337 A1	5/2003	Lord	2012/0202454 A1	8/2012	Smith et al.
2003/0126470 A1 *	7/2003	Crites G06F 21/55 379/114.14	2013/0058274 A1	3/2013	Scherzer et al.
2003/0187939 A1	10/2003	O'Brien	2013/0144951 A1 *	6/2013	Viswanath H04L 67/2823 709/204
2003/0198325 A1	10/2003	Bayne	2013/0160108 A1 *	6/2013	Stachel G06F 21/31 726/17
2003/0200078 A1	10/2003	Luo et al.	2013/0162423 A1	6/2013	Rowe et al.
2003/0216983 A1	11/2003	Bodin	2013/0179949 A1	7/2013	Shapiro
2004/0029564 A1	2/2004	Hodge	2013/0246535 A1	9/2013	Yadava et al.
2004/0058667 A1	3/2004	Pienmaki et al.	2014/0020063 A1	1/2014	Hodge et al.
2004/0076272 A1	4/2004	Zafar et al.	2014/0044242 A1	2/2014	Hodge et al.
2004/0081296 A1	4/2004	Brown et al.	2014/0280631 A1	9/2014	Torgersrud
2004/0114740 A1	6/2004	Gickler	2015/0043721 A1	2/2015	Hodge et al.
2004/0120475 A1	6/2004	Bauer et al.	2015/0046978 A1	2/2015	Hodge et al.
2004/0196963 A1	10/2004	Appelman et al.	2015/0047004 A1	2/2015	Hodge et al.
2004/0202327 A1	10/2004	Little et al.	2015/0066523 A1	3/2015	Pan
2004/0235520 A1	11/2004	Cadiz et al.	2015/0103990 A1	4/2015	Lee
2004/0236838 A1	11/2004	Tout	2015/0143215 A1 *	5/2015	Hu H04L 12/1818 715/205
2004/0252447 A1	12/2004	Hesse et al.	2015/0181489 A1	6/2015	Chong et al.
2005/0010573 A1	1/2005	Garg	2015/0201080 A1	7/2015	Hodge et al.
2005/0055411 A1	3/2005	Bouchard et al.	2015/0215254 A1	7/2015	Bennett
2005/0078612 A1	4/2005	Lang	2015/0223705 A1	8/2015	Sadhu
2005/0080868 A1	4/2005	Malik	2016/0142537 A1	5/2016	Hodge et al.
2005/0094794 A1	5/2005	Creamer et al.	2016/0156625 A1	6/2016	Hodge et al.
2005/0114192 A1	5/2005	Tor et al.	2016/0381082 A1	12/2016	Hodge et al.
2005/0125226 A1	6/2005	Magee	2017/0127257 A1	5/2017	Saxena et al.
2005/0207341 A1	9/2005	Zhang	2017/0142258 A1	5/2017	Seyfedinov
2005/0265322 A1	12/2005	Hester	2017/0230285 A1 *	8/2017	Crabtree G06Q 10/0637
2005/0286498 A1	12/2005	Rand et al.	2017/0279857 A1	9/2017	Hodge et al.
			2017/0302756 A1	10/2017	Chou et al.
			2017/0324834 A1	11/2017	Hodge

(56)

References Cited

U.S. PATENT DOCUMENTS

2018/0213090	A1	7/2018	Hodge et al.	
2018/0288144	A1*	10/2018	Tondepu	H04L 29/06823
2018/0331987	A1	11/2018	Hodge	
2019/0132364	A1	5/2019	Hodge et al.	
2020/0252438	A1	8/2020	Hodge et al.	
2021/0021708	A1	1/2021	Seyfedinov	

FOREIGN PATENT DOCUMENTS

WO	WO 99/21330	A1	4/1999
WO	WO 99/48054	A1	9/1999

OTHER PUBLICATIONS

- Monshi et al., "Project CS 2008 Product Report", Jan. 16, 2009.*
- Pallickara et al., "A Framework for Secure End-to-End Delivery of Messages in Publish/Subscribe Systems", 2006 7th IEEE/ACM International Conference on Grid Computing, Sep. 28, 2006.*
- Spindler et al., "Privacy in Video Surveilled Areas", Proceedings of the 2006 International Conference on Privacy, Security, and Trust: Bridge the Gap Between PST Technologies and Business Services, Oct. 2006, ACM Publishing.*
- Examination Report directed to related Australian Patent Application No. 2017260202, dated Mar. 16, 2021; 7 pages.
- "Cisco IAD2400 Series Business-Class Integrated Access Device", Cisco Systems Datasheet, 2003.
- "SIP and IPLink™ in the Next Generation Network: An Overview," Intel, 2001.
- "Voice Over Packet in Next Generation Networks: An Architectural Framework," Bellcore, Special Report SR-4717, Issue 1, Jan. 1999.
- "Criminal Calls: A Review of the Bureau of Prisons' Management of Inmate Telephone Privileges," U.S. Department of Justice, Office of the Inspector General, Aug. 1999.
- "Why Can't You Make a Collect Call to a Cell Phone," National Public Radio, Jun. 30, 2008, Accessed via <http://www.npr.org/templates/story/story.php?storyId=92021561> on Apr. 6, 2015.
- 1800MumDad.com.au—Explanation, Aug. 29, 2007—Retrieved from the Internet Archive Wayback Machine at <https://web.archive.org/web/20070829114354/http://1800mumdad.com.au/main.php?type=charges2>; 2 pages.
- 1800MumDad.com.au—Summary Standard Form of Agreement, Apr. 26, 2006—Retrieved from the Internet Archive Wayback Machine at <https://web.archive.org/web/20060426180115/http://www.1800mumdad.com.au/main.php?type=summariesfoa>; 3 pages.
- Advanced Technologies Group, Inc., White Paper: Introduction to Advanced Technologies Group, Inc., Inmate Correspondence System, Aug. 5, 2002, American Corrections Association Annual Conference, Anaheim, California.
- Advanced Technologies Group, Inc., Correspondence System Poster, published Jul. 29, 2002 by Exhibit-Resources Midwest, displayed at Aug. 2002 American Corrections Association Annual Conference, Anaheim, California.
- Advanced Technologies Group, Inc., Offender Management Suite: Correspondence System Brochure, printing invoice dated Aug. 2, 2002, brochure distributed at Aug. 2002 American Corrections Association Annual Conference, Anaheim, California.
- Ahimovic et al., "Services for Tomorrow's PCS," IEEE International Conference on Universal Personal Communications, vol. 1, Oct. 12-15, 1993; pp. 222-227.
- Avtalion, J., "Keeping tabs on call centres," Telecommunications, vol. 31, No. 7, Jul. 1997, pp. 70-72.
- Brown, et al., "SMS: The Short Message Service," Computer, vol. 40, No. 12, 2007.
- BubbleLINK® Software Architecture (Science Dynamics 2003).
- Bur Goode, Voice Over Internet Protocol (VoIP), Proceedings of the IEEE, vol. 90, No. 9, 1495-1517 (Sep. 2002).
- Clifford J. Weinstein, MIT, The Experimental Integrated Switched Network—A System-Level Network Test Facility (IEEE 1983).
- Commander Call Control System, Rev. 1.04 (Science Dynamics 2002).
- Confalone et al., "Calling Card Service—TSPS Hardware, Software, and Signaling Implementation," The Bell System Technical Journal, Sep. 1982, vol. 61, No. 7; pp. 1675-1714.
- Creps, et al., "Is somebody watching? Employee communications and privacy," Risk Management vol. 44, No. 4, Apr. 1997, pp. 22-28.
- Digital "Bellcore Notes on the Networks," Bellcore, Special Report SR-2275, Issue 3, Dec. 1997.
- English-language Abstract for European Patent Publication No. 0989720 A1; 2 pages.
- Excerpts from U.S. Appl. No. 60,538,933 to Shapiro, filed Jan. 22, 2004, 7 pages.
- Excerpts from the Prosecution History of U.S. Appl. No. 10/135,878, filed Apr. 29, 2002.
- Reexamination U.S. Appl. No. 90/012,802 of U.S. Pat. No. 8,190,121, filed Mar. 1, 2013.
- Gamer, et al., "Mobile Terminated SMS Billing—Exploits and Security Analysis," IEEE International Conference on Information Technology: New Generations, 2006.
- Henry, M., "Unethical staff behavior," Corrections Today, vol. 60, No. 3, Jun. 1, 1998.
- International Search Report and Written Opinion directed to International Patent Application No. PCT/US2016/018653, dated May 30, 2016; 11 pages.
- International Search Report and Written Opinion directed to International Patent Application No. PCT/US2017/031321, dated Jul. 14, 2017; 13 pages.
- Jeff Hewett and Lee Dryburgh, Signaling System No. 7 (SS7/C7): Protocol, Architecture, and Services (Networking Technology) at 85 (Cisco Press, Jun. 2005).
- Maghan, J., "Intelligence Gathering Approaches in Prisons," Low Intensity Conflict & Law Enforcement, vol. 3, No. 3, 1994, pp. 548-557.
- McKitterick et al., "State of the Art Review of Mobile Payment Technology," Department of Computer Science, Trinity College Dublin; 22 pages.
- Operator Service System Generic Requirements, OSSGR, TR-TSY-000271, Collect Billing, Rev. 3, Mar. 1988; 50 pages.
- Osifchin, N., "A Telecommunications Buildings/Power Infrastructure in a New Era of Public Networking," IEEE 2000.
- PacketCable™ 1.0 Architecture Framework Technical Report, PKT-TR-ARCH-V0 1-001201 (Cable Television Laboratories, Inc. 1999).
- Pages from <http://www.corp.att.com/history>, archived by web.archive.org on Nov. 4, 2013.
- Photocopy of "Bellcore Notes on the Networks (Formerly BOC Notes on the LEC Networks)," Bellcore, Special Report SR-2275, Issue 3, Dec. 1997.
- Procops, T., "Advanced call logging for public safety organizations," Public Management, vol. 82, vol. 3, Mar. 2000, pp. 17-19.
- Prosecution History of U.S. Appl. No. 11/045,589, filed Jan. 28, 2005.
- Rey, R.F., ed., "Engineering and Operations in the Bell System," 2nd Edition, AT&T Bell Laboratories: Murray Hill NJ, 1983.
- Schwartz, et al., "How to Build an SMS Service," O'Reilly Short Cuts, 2007.
- Science Dynamics, Inmate Telephone Control Systems, http://scidyn.com/fraudprev_main.htm (archived by web.archive.org on Jan. 12, 2001).
- Science Dynamics, SciDyn BubbleLINK, <http://www.scidyn.com/products/bubble.html> (archived by web.archive.org on Jun. 18, 2006).
- Science Dynamics, SciDyn Call Control Solutions: Commander II, <http://www.scidyn.com/products/commander2.html> (archived by web.archive.org on Jun. 18, 2006).
- Science Dynamics, SciDyn IP Gateways, <http://scidyn.com/products/ipgateways.html> (archived by web.archive.org on Aug. 15, 2001).
- Science Dynamics, Science Dynamics—IP Telephony, http://www.scidyn.com/iptelephony_maim.htm (archived by web.archive.org on Oct. 12, 2000).

(56)

References Cited

OTHER PUBLICATIONS

Shearer, G., "How logging and monitoring technologies improve quality in a call center," *Telemarketing & Call Center Solutions*, vol. 16, No. 7, Jan. 1998, pp. 92-101.

Smith, M., "Corrections Turns Over a New LEAF: Correctional Agencies Receive Assistance From the Law Enforcement Analysis Facility," *Corrections Today*, Oct. 1, 2001.

Sundstrom, K., "Voice over IP: An Engineering Analysis," Master's Thesis, Department of Electrical and Computer Engineering, University of Manitoba, Sep. 1999.

The Line Information Database (LIDB) and Wireless Services, *Telcordia Technologies White Paper*, Dec. 2001; 31 pages.

U.S. Appl. No. 15/288,520, "Electronic Messaging Device," to Hodge et al., filed Oct. 7, 2016.

U.S. Appl. No. 60/036,689, filed Jan. 31, 1997, titled Database Origami.

U.S. Appl. No. 60/246,070, "Employee Online Activity Monitoring System," to Mcfarlane, et al., filed Nov. 7, 2000.

U.S. Appl. No. 60/500,725, "SMS Message Processing," to Claudatos, filed Sep. 4, 2003.

U.S. Appl. No. 60/607,447, "IP-based telephony system and method," to Apple, et al., filed Sep. 3, 2004.

U.S. Appl. No. 60/935,634, "Method of Enabling an SMS Text Message to Facilitate Payment on a Cellular Bill for a Billable Call Received on a Cell Phone," to Martin, et al., filed Aug. 23, 2007.

Valcourt, et al., "Investigating mobile payment: Supporting technologies, methods, and use," *IEEE International Conference on Wireless and Mobile Computing, Networking, and Communications*, 2005.

Web pages from "Electronic Message Solutions Inc. (EMS): Improving Relationships through faster Correspondence," 2004, 9 pages; retrieved from <http://www.inmatemail.com>.

Wendt, et al., "Content recognition for telephone monitoring," *Proceedings of the SPIE—The International Society for Optical Engineering*, vol. 4232, 2001, pp. 274-280.

Wireless Interconnection and Reciprocal Compensation Agreement Between Community Telephone Company and United States Cellular Corporation, Apr. 24, 2006; 29 pages.

* cited by examiner

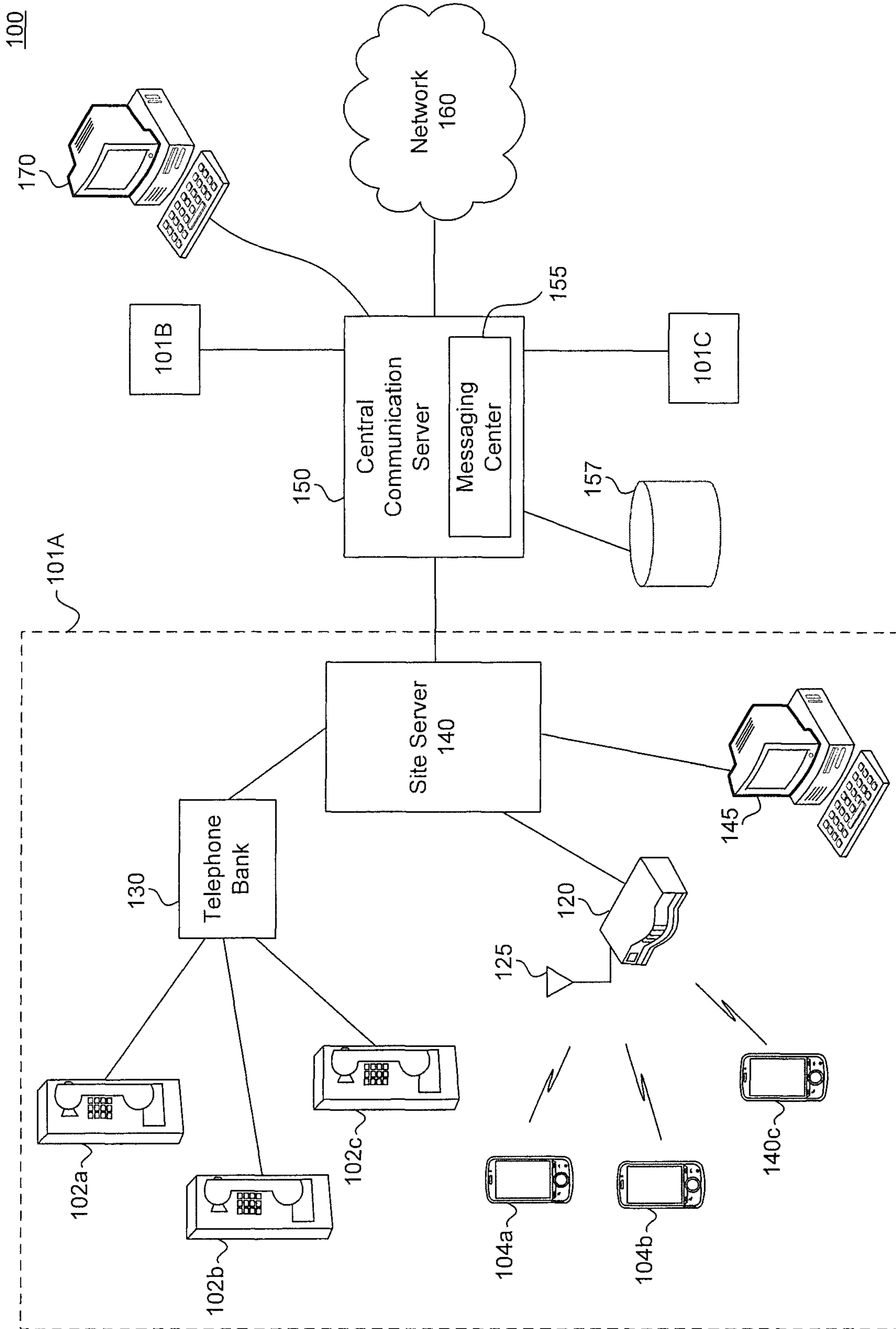


FIG. 1

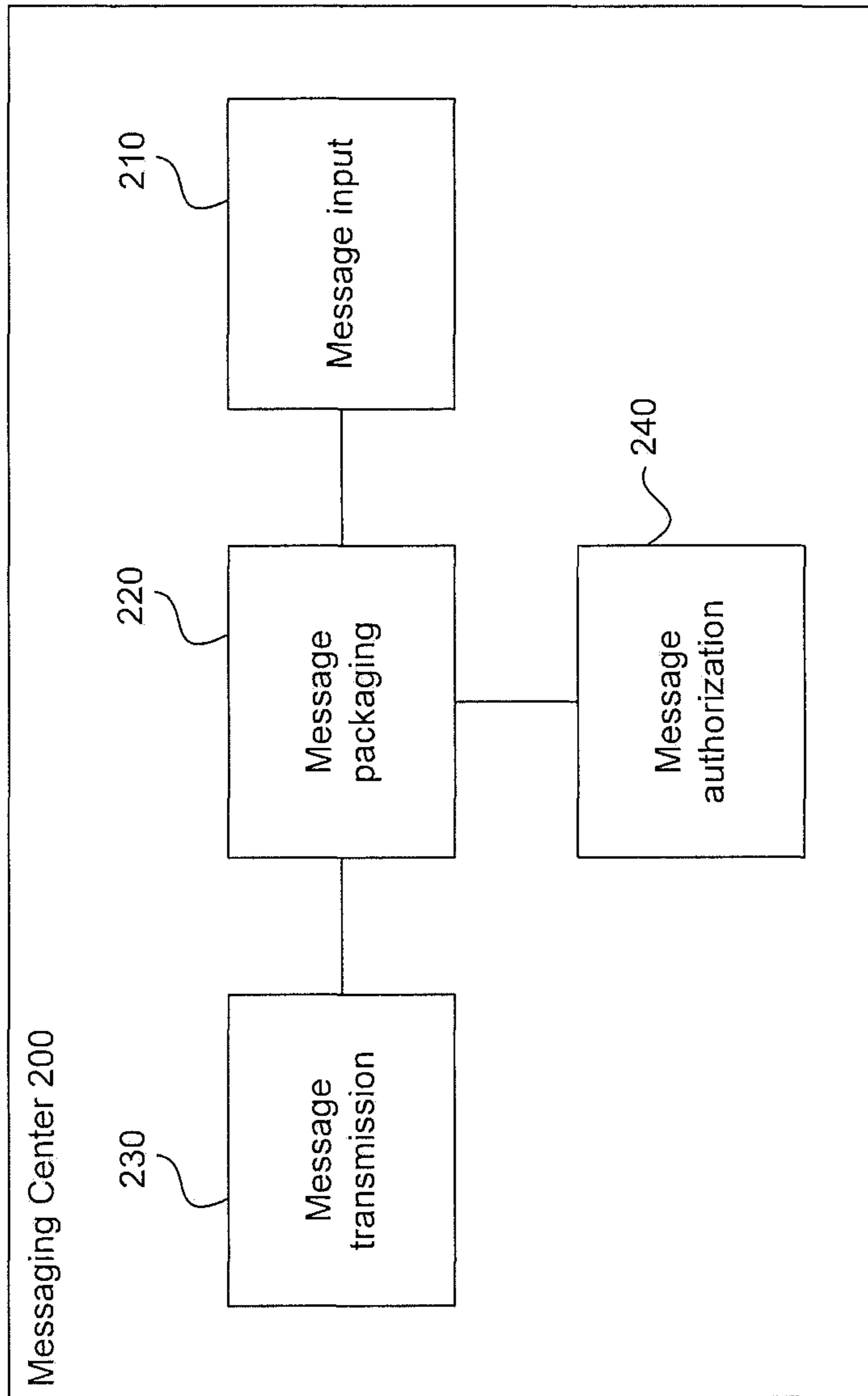


FIG. 2

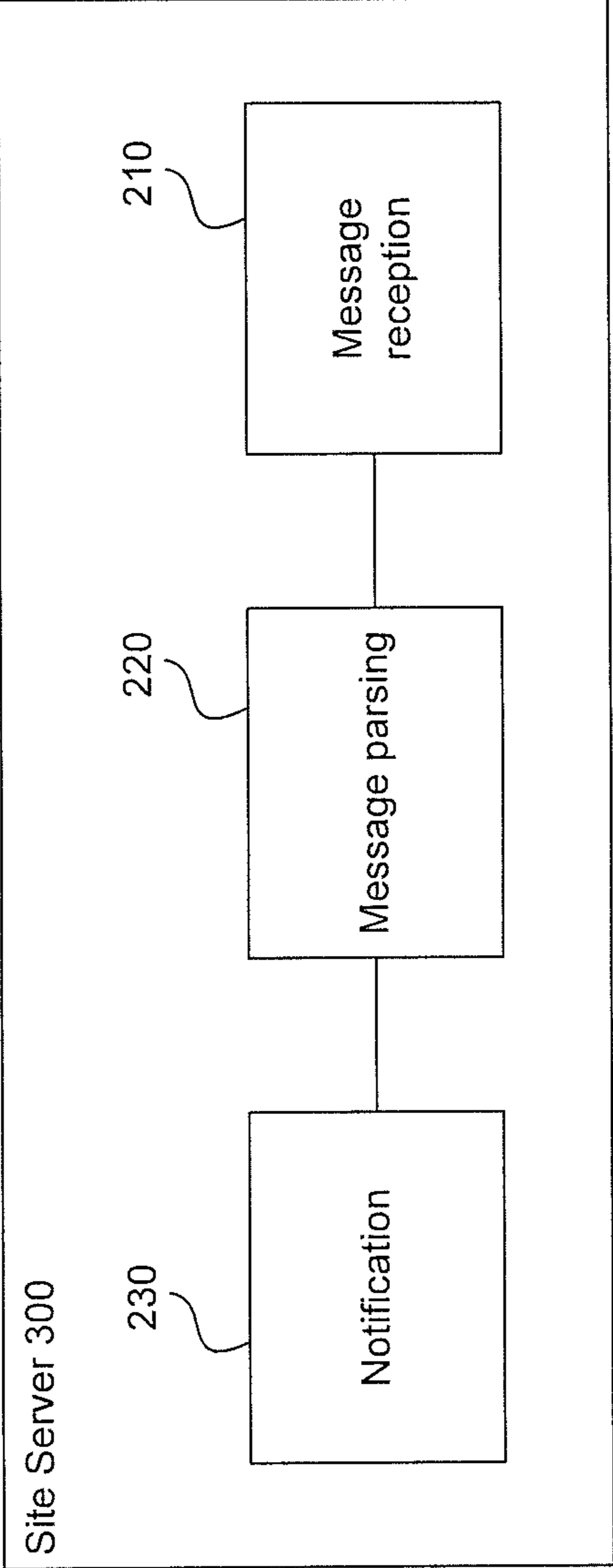


FIG. 3

Database 400

			COMM 1		COMM 2
Facility	Block	Person	AWD Address		
Facility 1	Block 1	Peter Smith	AWD Address 1		psmith@facility1.com
Facility 1	Block 1	John White	Voice Message Box		Bulletin
Facility 1	Block 1	3			
Facility 1	Block 2	1			
Facility 1	Block 2	2			
Facility 2	Block 1	1			
Facility 2	Block 1	2			
Facility 2	Block 1	3			
Facility 2	Block 1	4			
Facility 2	Block 2	1			
Facility 2	Block 2	2			
Facility 2	Block 3	1			
Facility 2	Block 3	2			
Facility 3	Block 1	1			
Facility 3	Block 1	2			
Facility 3	Block 1	3			
Facility 3	Block 1	4			
Facility 3	Block 2	1			
Facility 3	Block 2	2			
Facility 3	Block 2	3			
Facility 3	Block 2	4			

FIG. 4

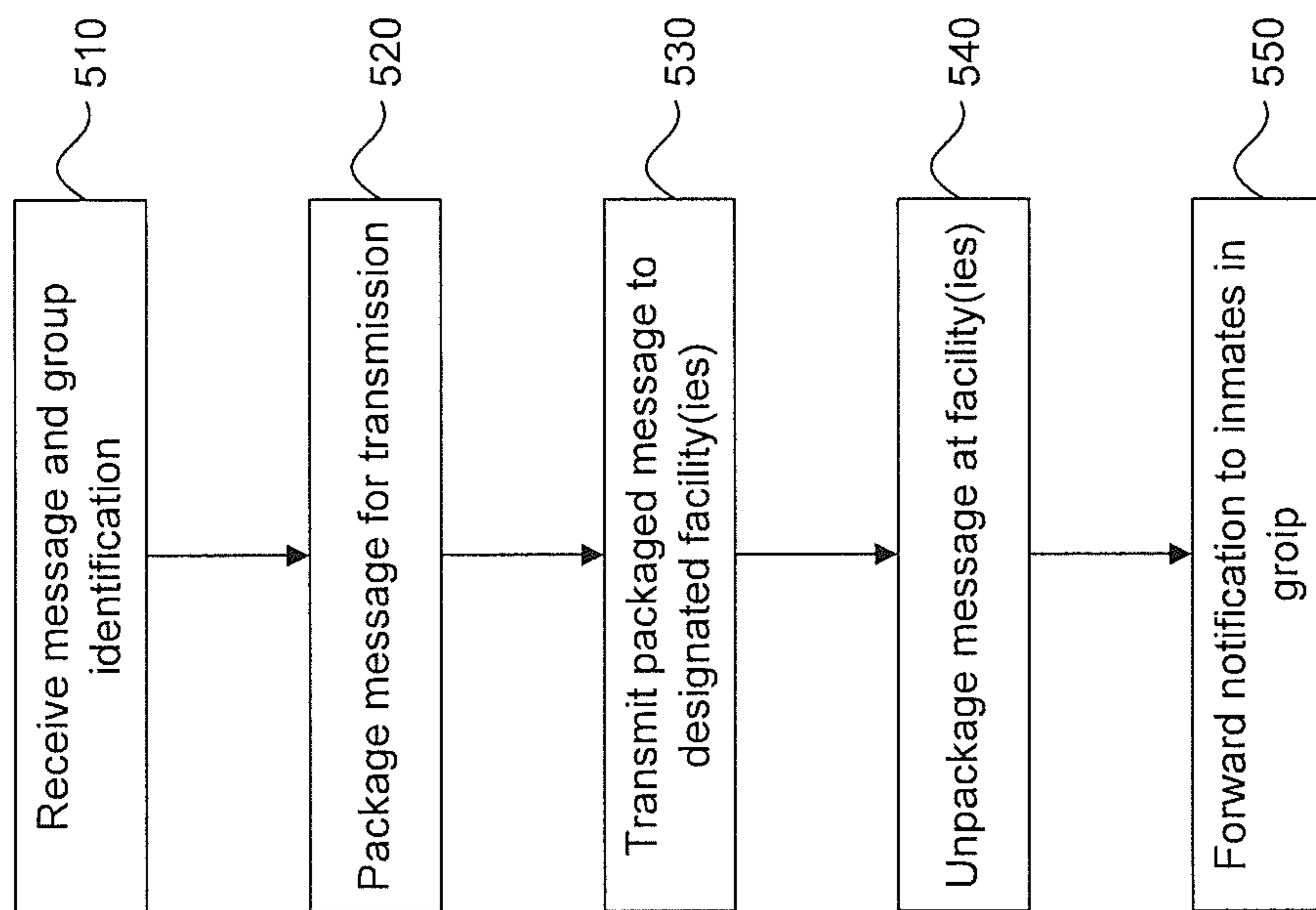


FIG. 5

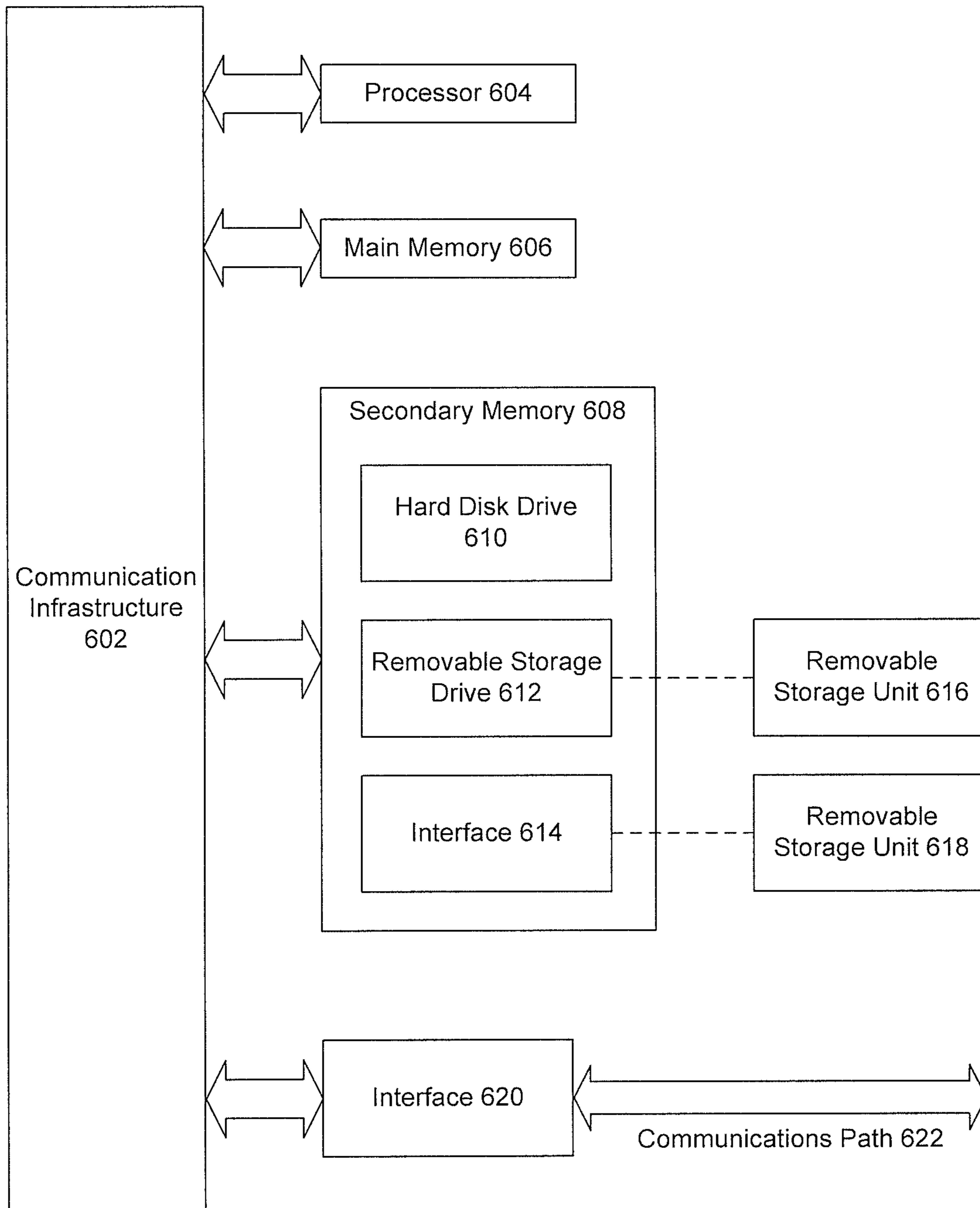


FIG. 6

SYSTEM AND METHOD FOR INMATE NOTIFICATION AND TRAINING IN A CONTROLLED ENVIRONMENT FACILITY

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. patent application Ser. No. 15/592,944 filed on May 11, 2017, which is incorporated by reference herein in its entirety.

BACKGROUND

Field

This disclosure relates to disseminating information, such as notifications and announcements to inmates of a controlled environment facility.

Background

Inmates of prisons or other controlled environment facilities live under very controlled conditions, and their access to information from both inside and outside the prison is often limited. However, many situations arise in which prison officials desire to disseminate certain information to the inmates. As of currently, that information is passed along in rather inconvenient and inaccurate ways, such as word of mouth or PA announcements.

BRIEF DESCRIPTION OF THE DRAWINGS/FIGURES

The accompanying drawings, which are incorporated herein and form a part of the specification, illustrate embodiments of the present disclosure and, together with the description, further serve to explain the principles of the disclosure and to enable a person skilled in the pertinent art to make and use the embodiments.

FIG. 1 illustrates a block diagram of an exemplary controlled environment communication system, according to embodiments of the present disclosure.

FIG. 2 illustrates a block diagram of an exemplary messaging center of the exemplary controlled environment communication system of FIG. 1, according to embodiments of the present disclosure.

FIG. 3 illustrates a block diagram of an exemplary site server for use in the exemplary controlled environment communication system of FIG. 1, according to embodiments of the present disclosure.

FIG. 4 illustrates an exemplary data table for use with the exemplary messaging center of FIG. 2, according to embodiments of the present disclosure.

FIG. 5 illustrates a flowchart diagram of an exemplary method for disseminating a notification to one or more inmates of a controlled environment facility.

FIG. 6 illustrates a block diagram of computer system.

The present disclosure will be described with reference to the accompanying drawings. In the drawings, like reference numbers indicate identical or functionally similar elements. Additionally, the left most digit(s) of a reference number identifies the drawing in which the reference number first appears.

DETAILED DESCRIPTION

The following Detailed Description refers to accompanying drawings to illustrate exemplary embodiments consist-

tent with the disclosure. References in the Detailed Description to “one exemplary embodiment,” “an exemplary embodiment,” “an example exemplary embodiment,” etc., indicate that the exemplary embodiment described may include a particular feature, structure, or characteristic, but every exemplary embodiment may not necessarily include the particular feature, structure, or characteristic. Moreover, such phrases are not necessarily referring to the same exemplary embodiment. Further, when a particular feature, structure, or characteristic is described in connection with an exemplary embodiment, it is within the knowledge of those skilled in the relevant art(s) to affect such feature, structure, or characteristic in connection with other exemplary embodiments whether or not explicitly described.

The exemplary embodiments described herein are provided for illustrative purposes, and are not limiting. Other exemplary embodiments are possible, and modifications may be made to the exemplary embodiments within the spirit and scope of the disclosure. Therefore, the Detailed Description is not meant to limit the disclosure. Rather, the scope of the disclosure is defined only in accordance with the following claims and their equivalents.

Embodiments may be implemented in hardware (e.g., circuits), firmware, software, or any combination thereof. Embodiments may also be implemented as instructions stored on a machine-readable medium, which may be read and executed by one or more processors. A machine-readable medium may include any mechanism for storing or transmitting information in a form readable by a machine (e.g., a computing device). For example, a machine-readable medium may include read only memory (ROM); random access memory (RAM); magnetic disk storage media; optical storage media; flash memory devices; electrical, optical, acoustical or other forms of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.), and others. Further, firmware, software, routines, instructions may be described herein as performing certain actions. However, it should be appreciated that such descriptions are merely for convenience and that such actions in fact result from computing devices, processors, controllers, or other devices executing the firmware, software, routines, instructions, etc. Further, any of the implementation variations may be carried out by a general purpose computer, as described below.

For purposes of this discussion, any reference to the term “module” shall be understood to include at least one of software, firmware, and hardware (such as one or more circuit, microchip, or device, or any combination thereof), and any combination thereof. In addition, it will be understood that each module may include one, or more than one, component within an actual device, and each component that forms a part of the described module may function either cooperatively or independently of any other component forming a part of the module. Conversely, multiple modules described herein may represent a single component within an actual device. Further, components within a module may be in a single device or distributed among multiple devices in a wired or wireless manner.

The following Detailed Description of the exemplary embodiments will so fully reveal the general nature of the disclosure that others can, by applying knowledge of those skilled in relevant art(s), readily modify and/or customize for various applications such exemplary embodiments, without undue experimentation, without departing from the spirit and scope of the disclosure. Therefore, such modifications are intended to be within the meaning and plurality of equivalents of the exemplary embodiments based upon the teaching and guidance presented herein. It is to be under-

stood that the phraseology or terminology herein is for the purpose of description and not of limitation, such that the terminology or phraseology of the present specification is to be interpreted by those skilled in relevant art(s) in light of the teachings herein.

As discussed above, there are currently insufficient means of disseminating information to inmates within controlled facilities. This is partially due to the traditional communications limitations within prison facilities. Because of substantial security concerns, inmates of such facilities were traditionally limited to placing calls at highly-monitored central telephone banks in the facility, and their access to the Internet was completely prohibited. However, recent technological advancements have allowed for inmates of secure facilities to be assigned wireless communication devices, such as that described in U.S. patent application Ser. No. 13/946,637, entitled Multifunction Wireless Device, the entirety of which is incorporated herein by reference.

With the advent of these new communication capabilities, controlled environment facilities have significant new communications lines available between administrators and the inmates. Thus, it is conceived that those devices be used as a means for facilitating better and more direct communication with inmates for purposes of information dissemination. Systems and methods for carrying out these objectives will be described herein for carrying out those objectives.

Exemplary Communication System

FIG. 1 illustrates a block diagram of an exemplary controlled environment communication system **100**, according to embodiments of the present disclosure. The communication system includes a central communication server **150** connected to a plurality of different controlled environment facilities **101**. The central communication server **150** performs the call and other communications data processing for the different facilities, including routing and monitoring calls, Internet activity, and video calling, etc. In an embodiment, the central communication server **150** is centrally located from the multiple controlled environment facilities. In another embodiment, the central communication server **150** is located on site at one of the controlled environment facilities **101**. The central communication server **150** also includes a messaging center **155** for processing incoming and outgoing messages or other notifications to the inmate population.

In an embodiment, an exemplary controlled environment facility includes a site server **140** that handles internal call processing and routing. In an alternative embodiment, the site server **140** is located remotely from the facility, such as within the central communication server **150**. Such processing primarily includes routing call data from the central communication server **150** to its respective destination telephone device. A telephone bank **130** and a router **120** are in communication with the site server **140** for receiving call data from the site server **140**. The telephone bank **130** serves a plurality of hardwired telephones **102**. These phones may be VoIP, POTS, or other telephone devices capable of communication with the site server **140** over a telephone or data communication line. Meanwhile, the router **120** includes one or more antenna **125** for wirelessly communicating with one or more wireless communication devices **104** assigned to the different inmates and/or prison personnel associated with the facility. An on-site administrative terminal **145** is also connected to the site server to allow for an authorized individual to send a notification or other message, and/or access the central communication server **150**.

Multiple other controlled environment facilities **101** are connected to the central communication server **150**. Those

facilities **101** may have the same or similar configurations to the exemplary controlled environment facility **101A**. Also connected with the central communication server **150** is an administrative terminal **170**, a database **157**, and a network **160**. In an embodiment, the administrative terminal **170** is an on-site computer terminal, accessible by an authorized administrator, and with control capabilities of the central communication server **150**. In an embodiment, the database **157** is a separate database located remotely from the central communication server **150**, and stores numerous different types of call and administrative data relating to one or more of the controlled environment facilities **101**. In an embodiment, the network **160** is a public network for communicating across telephone or other communication lines to outside parties, such as the public switched telephone network (PSTN).

In operation, a pre-registered individual attempts to access the messaging center **155** via either the on-site administrative terminal **145** or the administrative terminal **170**. If the individual has not yet been registered, the individual must undergo a registration process to register certain identifying information of the individual along with authentication information, such as a PIN or biometric sample associated with the individual. The registration information is stored in the database **157** along with messaging permissions. At some point before the individual submits a message, the individual is prompted to identify themselves, after which an authentication of the individual occurs. The individual may identify themselves using a PIN or a biometric submission, such as a fingerprint, voice sample, facial scan, etc. The administrative terminal **145/170** forwards the received information to the central communication server **150** for authentication.

The central communication server **150** uses the received identifying information to locate a user record in the database with matching identifying information. Once retrieved, biometric authentication is performed by performing a statistical comparison of the received biometric identification to the previously-stored biometric information. Based on the comparison, the central communication server **150** authenticates the individual. After the user has been authenticated, the central communication server **150** returns a notification to the corresponding terminal that the individual has been authenticated along with the individual's messaging permissions based on the retrieved user record. Summarily, the messaging permissions identify whether the individual is permitted to submit messages with or without approval, and for which inmates.

After the user has been authenticated, the user submits a message via an interface associated with the corresponding administrative terminal **145/170** along with an identification of recipient inmates. In an embodiment, the recipient inmates are identified as a group, such as by location or status. The terminal **145/170** transmits the message and recipient information to the central communication server **150**, where it is received by the messaging center **155**. The messaging center **155** processes the received recipient information and transmits the received message over the various communication lines to the identified recipients. Further details regarding the message processing and transmission is described below.

Exemplary Messaging Center

FIG. 2 illustrates a block diagram of an exemplary messaging center **200** of the exemplary controlled environment communication system **100** of FIG. 1, according to embodiments of the present disclosure. The messaging center **200** includes message input **210**, message packaging **220**, mes-

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sage transmitter **230**, and message authorization **240**, and may represent an exemplary embodiment of the messaging center **150**, illustrated in FIG. 1.

In an embodiment, the messaging center **200** receives the message from the user at message input **210**. As discussed above, the message is received from the user via one of the administrative terminals **145/170**, through the central communication system **150**. In another embodiment, the user sends the message information from a separate device, such as a personal wireless device or personal computer workstation. At the message input **210** of the messaging center **200**, the message is received with all necessary information for proper delivery, including the message itself as well as intended recipient information, such as inmate group, facility, district, etc.

The message input **210** forwards the received information to the message packaging **220**. Message packaging **220** reviews the destination information received with the message and accesses a database to review transmission protocols for the intended destination. For example, many facilities may have specific transfer protocols, message formats, etc. These protocols are stored in the message packaging **220**, or in database **157** accessed by the message packaging **220**. After the message protocols are retrieved by the message packaging **220**, message packaging formats the relevant information into the appropriate format dictated by the retrieved format information for transmission. To provide an example, a particular facility may provide a certain number of leading bits in the message for the inmate designation, and may also designate how different inmate groups are to be referenced within the encoded message. Based on this information, message packaging assigns the relevant inmate group code based on the destination information within the message, and then organizes the destination information and the message information into the final encoded message for transmission.

In an embodiment, message packaging **220** also utilizes the user information received in the received message to determine permissions. In other words, using the user information associated with the received message, message packaging **220** checks the database **157** to determine the permission level associated with the user. Certain users are granted different messaging permissions. In an embodiment, there are three levels of permissions, including full, limited, and none. Full permissions allow for messages to be transmitted without review or authorization, limited permissions allow for messages to be transmitted after authorization from a registered user with full permissions to the destination, and those with no permissions are prohibited from sending messages to the destination. For example, the warden of a particular facility is granted full permissions for that facility, but limited permissions for all other facilities within the district, and no permissions for other facilities in the state. Meanwhile, an administrator with the state department of corrections may be provided full permissions for all facilities in the state. In embodiments, the permissions are broken down by inmate groups within facilities, or even individual inmates within facilities.

If the message packaging **220** determines from the user information and the permissions data retrieved from the database that the user has no permissions to the destination information included in the received message information, the message packaging denies transmission of the message. If the message packaging **220** determines that the user has full permissions, the message packaging **220** packages the message for transmission to the destination. If the message packaging **220** determines that the user has limited permis-

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sions, message packaging controls message authorization **240** to contact a pre-designated authorized person to authorize the message. The message authorization **240** returns a “authorized” or “not authorized”. If the message authorization **240** returns “authorized”, the message packaging **220** proceeds to package and forward the message for transmission. On the other hand, if the message authorization **240** returns “not authorized,” message packaging declines to send the message.

The message transmitter **230** receives the packaged message from message packaging **220**, and then transmits the packaged message to the relevant facility designated in the message. In an embodiment, the facility is designated in the packaged message by an IP address or other network address.

Site Server

FIG. 3 illustrates an exemplary site server **300** according to an embodiment. The site server **300** includes a message receiver **310**, message parsing **320**, and notification **330**, and may represent an exemplary embodiment of the site server **140** of FIG. 1.

As discussed above, each facility may have its own message formatting requirements. Regardless, there is more information than simply the message, which is received by the site server **300**. Namely, the received message includes the message, as well as recipient information, message sender, etc. Additional examples of information that can be included in a received message package is delivery time, permissions, etc. All this information is packaged together into the format designated by the facility, and transmitted to the facility by the central communication server **140**.

The packaged message is received at the site server **300** by the message receiver **310**. The message receiver **310** forwards the received message package to the message parsing **320**. The message parsing utilizes the predetermined message format associated with the facility to parse out the different informational portions of the received message. For example, the message parsing **320** extracts the message, the recipient information, and any other portions of the message package included therein.

Once all relevant elemental portions of the message have been extracted, the notification **330** proceeds to carry out message delivery. For example, at a minimum, the notification **330** retrieves the recipient information and the message, and forwards the message to all of the recipients identified. In an embodiment, the recipients are identified individually. In another embodiment, the recipients are identified as part of a group, such as a particular cell block, wing, or facility.

In an embodiment, delivery methods for each inmate are stored in a database located within the facility **101A**, such as within site server **140**. In this embodiment, when carrying out the deliver process, the notification **330** accesses the database and retrieved delivery methods for each recipient. Such delivery methods may include SMS or MMS message, email, PA announcement, or digital bulletin board, among others. The delivery method selected for each recipient may depend on the recipients available communication methods. For example, an inmate with an assigned wireless communication device will have SMS or MMS delivery methods selected, whereas an inmate without such a device will be limited to email (if he/she has such access), or PA/bulletin.

As discussed above, the notification **330** may also adjust the notification procedure based on the other data fields included in the message package. For example, if the message package includes a delivery time, the notification **330** will wait to transmit the message until the designated

time. Other modifications are available based on other data fields in the message package.

In the manner described above, facilities are capable of receiving and disseminating messages to designated individuals housed therein.

FIG. 4 illustrates an exemplary data table for use with the exemplary messaging center of FIG. 2, according to embodiments of the present disclosure. The table includes numerous information useful for the dissemination of information to inmates. The database is organized according to facility, as shown in the first column 410. Each facility can be further broken down into smaller subsections of residents, such as cell blocks (shown in second column 420). There may be multiple, or different, subsections than that depicted, including wing, security level, responsible security officer, etc. Regardless of which, or how many, subsets are included in the database, each inmate is identified in correspondence with his/her relevant data points, such as shown in the third column 430. In the example shown in FIG. 4, inmate Peter Smith is a resident of Facility 1, Cell Block 1. In an embodiment, all inmates of the facility that are capable of receiving notifications via the notification system are identified in this database with their respective location information.

In addition to location and identification information, the database also includes delivery information. The delivery information should include at least a primary notification means, such as shown in the fourth column 440. In an embodiment, secondary or more notification means are also included, such as shown in the fifth column 450. The notification means shown in the fourth and fifth columns include a destination address for the inmate, where such an address exists, and a general notification description where no such address exists. For the example shown in FIG. 4, inmate peter smith should primarily be notified via his assigned wireless device at the device address: "AWD Address 1." In an embodiment, the address of the assigned wireless device can be in the form of IP address, device identification, MAC address, etc. Secondly, Peter Smith is to be notified via email at the address: "psmith@facility1.com." In each of these communication methods, an address exists and is so identified in the database.

In a second example of FIG. 4, a second inmate of facility 1, John White, is primarily to be notified via his voice message box. For such a notification, no address is necessary because the central communication server 150 maintains a voice message box for each inmate through which he can send and receive messages with outsiders. Typically, upon next accessing the telecommunication system (or via other means), the inmate will receive notification of a pending message, upon which he can login to the system and retrieve his message. Secondly, inmate John White is to be notified via bulletin, which requires that the message be posted somewhere publicly where he is likely to see the message. In an embodiment, the system 100 includes an electronic bulletin connected with the central communication server, that is configured to be updated with new notification information from the messaging 200 for publishing.

In the above embodiment, all the described data elements are included in a single database that is accessible by, and/or managed by, the central communication server 150. However, in another embodiment, it may be beneficial to maintain the delivery information at the facility, since that is where that information becomes relevant. In the former embodiment, the delivery information is packaged with the message information in the transmitted message, whereas in

the latter embodiment, the delivery information can be omitted from the packaged message and determined at the site based on the identified recipients/groups. By maintaining a relational database of the inmates and all their relevant groups, the system is able to efficiently parse messages to all intended recipients without requiring a full list of those recipients. In an embodiment, the system also allows for the user to input an omission, such as a person of the identified delivery group to which the message will not be sent.

FIG. 5 illustrates a flowchart diagram of an exemplary method for generating and transmitting messages to inmates. In the embodiment, the system receives a message and a recipient identification from the user (510). In an embodiment, the recipient is a group of inmates at one or more facilities, which are identified by their group rather than individually. After the relevant information has been received, the system packages the message (520) together with all relevant delivery information, such as group identification, omission information, delivery time, and authorization status of the sender. In an embodiment, the packaging may also include an encoding scheme unique to the destination prison, if applicable.

Once packaged, the packaged message is transmitted to the one or more facilities that include recipient inmates (530). If the designated recipient group is limited to inmates of a single facility, then the message is transmitted only to that facility. On the other hand, if the designated recipient group includes inmates of multiple facilities, then the packaged message is sent to all of those facilities. In this latter scenario, if facility-specific encoding is required, a separate packaged message can be generated for each facility that has a different encoding scheme in that encoding scheme.

Once the message is received by the facility, the facility unpacks the packaged message using its encoding scheme (540). As a result of the unpacking of the message, the different portions of the packaged message are extracted and parsed. The facility-based delivery system analyzes the parsed information in order to determine when, how, and to whom the extracted message is to be delivered. The facility-based system then delivers the message in accordance with that determination (550).

As has been described above, the system for delivering messages includes two separate messaging systems, one centralized to receive a message, and forward relevant messaging information to designated facilities, and a second that is located on-site at a facility (or off-site, but which serves the facility) to handle final delivery responsibilities of the received message within the facility. However, in an embodiment, these two messaging system can be combined into a single system that has communication privileges within the facility for carrying out final delivery responsibilities.

Exemplary Computer Implementation

It will be apparent to persons skilled in the relevant art(s) that various elements and features of the present disclosure, as described herein, can be implemented in hardware using analog and/or digital circuits, in software, through the execution of computer instructions by one or more general purpose or special-purpose processors, or as a combination of hardware and software.

The following description of a general purpose computer system is provided for the sake of completeness. Embodiments of the present disclosure can be implemented in hardware, or as a combination of software and hardware. Consequently, embodiments of the disclosure may be implemented in the environment of a computer system or other processing system. For example, the method of FIG. 5 can

be implemented in the environment of one or more computer systems or other processing systems. An example of such a computer system 600 is shown in FIG. 6. One or more of the modules depicted in the previous figures can be at least partially implemented on one or more distinct computer systems 600.

Computer system 600 includes one or more processors, such as processor 604. Processor 604 can be a special purpose or a general purpose digital signal processor. Processor 604 is connected to a communication infrastructure 602 (for example, a bus or network). Various software implementations are described in terms of this exemplary computer system. After reading this description, it will become apparent to a person skilled in the relevant art(s) how to implement the disclosure using other computer systems and/or computer architectures.

Computer system 600 also includes a main memory 606, preferably random access memory (RAM), and may also include a secondary memory 608. Secondary memory 608 may include, for example, a hard disk drive 610 and/or a removable storage drive 612, representing a floppy disk drive, a magnetic tape drive, an optical disk drive, or the like. Removable storage drive 612 reads from and/or writes to a removable storage unit 616 in a well-known manner. Removable storage unit 616 represents a floppy disk, magnetic tape, optical disk, or the like, which is read by and written to by removable storage drive 612. As will be appreciated by persons skilled in the relevant art(s), removable storage unit 616 includes a computer usable storage medium having stored therein computer software and/or data.

In alternative implementations, secondary memory 608 may include other similar means for allowing computer programs or other instructions to be loaded into computer system 600. Such means may include, for example, a removable storage unit 618 and an interface 614. Examples of such means may include a program cartridge and cartridge interface (such as that found in video game devices), a removable memory chip (such as an EPROM, or PROM) and associated socket, a thumb drive and USB port, and other removable storage units 618 and interfaces 614 which allow software and data to be transferred from removable storage unit 618 to computer system 600.

Computer system 600 may also include a communications interface 620. Communications interface 620 allows software and data to be transferred between computer system 600 and external devices. Examples of communications interface 620 may include a modem, a network interface (such as an Ethernet card), a communications port, a PCMCIA slot and card, etc. Software and data transferred via communications interface 620 are in the form of signals which may be electronic, electromagnetic, optical, or other signals capable of being received by communications interface 620. These signals are provided to communications interface 620 via a communications path 622. Communications path 622 carries signals and may be implemented using wire or cable, fiber optics, a phone line, a cellular phone link, an RF link and other communications channels.

As used herein, the terms "computer program medium" and "computer readable medium" are used to generally refer to tangible storage media such as removable storage units 616 and 618 or a hard disk installed in hard disk drive 610. These computer program products are means for providing software to computer system 600.

Computer programs (also called computer control logic) are stored in main memory 606 and/or secondary memory 608. Computer programs may also be received via commu-

nications interface 620. Such computer programs, when executed, enable the computer system 600 to implement the present disclosure as discussed herein. In particular, the computer programs, when executed, enable processor 604 to implement the processes of the present disclosure, such as any of the methods described herein. Accordingly, such computer programs represent controllers of the computer system 600. Where the disclosure is implemented using software, the software may be stored in a computer program product and loaded into computer system 600 using removable storage drive 612, interface 614, or communications interface 620.

In another embodiment, features of the disclosure are implemented primarily in hardware using, for example, hardware components such as application-specific integrated circuits (ASICs) and gate arrays. Implementation of a hardware state machine so as to perform the functions described herein will also be apparent to persons skilled in the relevant art(s).

CONCLUSION

It is to be appreciated that the Detailed Description section, and not the Abstract section, is intended to be used to interpret the claims. The Abstract section may set forth one or more, but not all exemplary embodiments, and thus, is not intended to limit the disclosure and the appended claims in any way.

The disclosure has been described above with the aid of functional building blocks illustrating the implementation of specified functions and relationships thereof. The boundaries of these functional building blocks have been arbitrarily defined herein for the convenience of the description. Alternate boundaries may be defined so long as the specified functions and relationships thereof are appropriately performed.

It will be apparent to those skilled in the relevant art(s) that various changes in form and detail can be made therein without departing from the spirit and scope of the disclosure. Thus, the disclosure should not be limited by any of the above-described exemplary embodiments, but should be defined only in accordance with the following claims and their equivalents.

What is claimed is:

1. A messaging platform of a controlled environment communication system, the messaging platform comprising:
 - a database that stores inmate data that includes delivery methods, the delivery methods including at least one of SMS text, MMS message, email, PA announcement, and digital bulletin board;
 - a communication interface configured to transmit and receive a message; and
 - one or more processors and/or circuits configured to:
 - receive message data from a user, the message data including the message, a recipient group identifier, user identification information, and a delivery parameter, the delivery parameter including at least one of omission information, a delivery time, and an authorization status of the user;
 - identify a permission level of the user based on the user identification information, the permission level including a facility identifier;
 - determine whether the recipient group identified by the recipient group identifier is commensurate with the determined permission level based on the facility identifier;

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identify a delivery procedure based on the delivery parameter and the stored delivery methods, the delivery procedure defining when, how, and to whom the extracted message is to be delivered;
 transmit or deny transmission of the message to the recipient group based on the determining, the message being transmitted to the recipient group in accordance with the delivery procedure.

2. The messaging platform of claim 1, wherein the identified permission level is a full permission level.

3. The messaging platform of claim 2, wherein the one or more processors and/or circuits are configured to cause the communication interface to transmit the message to the recipient group in response to identifying the permission level as full permission.

4. The messaging platform of claim 3, wherein the message is transmitted without review or authorization.

5. The messaging platform of claim 1, wherein the identified permission level is a limited permission level.

6. The messaging platform of claim 5, wherein the one or more processors and/or circuits are further configured to, in response to the identified permission level being a limited permission level:
 determine that the user is authorized to contact the recipient group; and
 receive authorization from a registered user with full permission.

7. The messaging platform of claim 1, wherein the identified permission level is none, and
 wherein the one or more processors and/or circuits are configured to withhold transmission of the message.

8. A method for transmitting a message to a recipient group of inmates of at least one of a controlled environment facility or a second facility, the method comprising:
 storing inmate data that includes delivery methods, the delivery methods including at least one of SMS text, MMS message, email, PA announcement, and digital bulletin board;
 receiving message data from a user, the message data including the message, a recipient group identifier, user identification information, and a delivery parameter, the delivery parameter including at least one of omission information, a delivery time, and an authorization status of the user;
 identifying a first permission level of the user having a first facility identifier and a second permission level of the user having a second facility identifier based on the user identification information;
 authorizing or restricting transmission of the message to the recipient group based on at least one of the first permission level or the second permission level and at least one of the first facility identifier or the second facility identifier; and
 identifying a delivery procedure based on the delivery parameter and the stored delivery methods, the delivery procedure defining when, how, and to whom the extracted message is to be delivered,
 wherein the message is transmitted to the recipient group in accordance with the identified delivery procedure.

9. The method of claim 8, wherein the first facility identifier identifies the controlled environment facility, and wherein the second facility identifier identifies the second facility.

10. The method of claim 9, further comprising:
 concluding that the recipient group includes only inmates of the controlled environment facility,

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wherein, in response to the concluding, the authorizing/restricting is based only on the first permission level.

11. The method of claim 9, further comprising:
 concluding that the recipient group includes only inmates of the second facility,
 wherein, in response to the concluding, the authorizing/restricting is based only on the second permission level.

12. The method of claim 9, further comprising:
 concluding that the recipient group includes inmates of the controlled environment facility and of the second facility;
 performing a first authorization process for the controlled environment facility based on only the first permission level; and
 performing a second authorization process for the second facility based on only the second permission level.

13. The method of claim 12, further comprising transmitting the message to only inmates of the controlled environment facility in response to the first authorization process succeeding and the second authorization process failing.

14. The method of claim 12, further comprising transmitting the message to only inmates of the second facility in response to the first authorization process failing and the second authorization process succeeding.

15. The method of claim 12, further comprising transmitting the message to inmates of both the controlled environment facility and the second facility in response to the first authorization process and the second authorization process succeeding.

16. A method for transmitting a message to a recipient group of a controlled environment, the method comprising:
 storing inmate data that includes delivery methods, the delivery methods including at least one of SMS text, MMS message, email, PA announcement, and digital bulletin board;
 receiving message data from a user, the message data including the message, a recipient group identifier, user identification information, and a delivery parameter, the delivery parameter including at least one of omission information, a delivery time, and an authorization status of the user;
 identifying a permission level of the user based on the user identification information, the permission level including a facility identifier;
 determining whether the recipient group identified by the recipient group identifier is commensurate with the determined permission level based on the facility identifier;
 identifying a delivery procedure based on the delivery parameter and the stored delivery methods, the delivery procedure defining when, how, and to whom the extracted message is to be delivered; and
 transmitting or denying transmission of the message to the recipient group based on the determining, the message being transmitted to the recipient group in accordance with the delivery procedure.

17. The method of claim 16, further comprising:
 identifying the permission level of the user as being a full permission level; and
 in response to the identifying, transmit the message to the recipient group without review.

18. The method of claim 16, further comprising:
 identifying the permission level of the user as being a limited permission level; and
 in response to the identifying, performing a content review of the message.

19. The method of claim 18, further comprising, in response to the identifying, receiving authorization from an administrator.

20. The method of claim 16, further comprising:
identifying the permission level of the user as being none; 5
and
denying transmission of the message.

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